

WHAT IS CLAIMED IS:

- 1 *Sub A* 1. A system for indicating proper sterilization of a mail article,
2 said system comprising:
3 a mail article;
4 a postage stamp affixed to said mail article, said postage stamp
5 having a color indicator;
6 a sterilization apparatus having means for sterilizing said mail
7 article;
8 whereby when said mail article is sterilized by the sterilization
9 apparatus, said color indicator changes from a first color to a second
10 color.
- 1 2. The system of claim 1 wherein the sterilization apparatus
2 emits an electron beam to sterilize said mail article.
- 1 3. The system of claim 1 wherein the sterilization apparatus
2 emits gamma radiation to sterilize said mail article.

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1 4. The system of claim 1 wherein the color indicator is a design
2 section on an outer surface of said postage stamp, said indicator
3 indicating a first color prior to exposure to sterilization from said
4 sterilization apparatus and the second color after exposure to sterilization
5 from said sterilization apparatus.

1 5. The system of claim 1 wherein the color indicator is a
2 background section on an outer surface of said stamp, said background
3 indicating a first color prior to exposure to sterilization from said
4 sterilization apparatus and the second color after exposure to sterilization
5 from said sterilization apparatus.

1 6. The system of claim 1 wherein said postage stamp provides
2 an indication of payment of postal fees for mailing said mail article.

1 7. The system of claim 1 wherein:
2 said sterilization apparatus emits an electron beam to sterilize said
3 mail article;
4 said postage stamp provides an indication of payment of postal
5 fees for mailing said mail article; and
6 said color indicator changes from the first color to the second color
upon exposure to said electron beam.

1 8. The system of claim 1 wherein said postage stamp is a meter
2 mark affixed to said mail article.

1 9. A method of indicating proper sterilization of a mail article
2 by a sterilization apparatus, said method comprising the steps of:

3 affixing; by a sender of the mail article, a postage stamp to a mail
4 article;

5 collecting, by a postal service, the mail article;

6 sterilizing, by the sterilization apparatus, the mail article;

7 transforming a portion of a postage stamp affixed to the mail
8 article from a first color to a second color when the mail article
9 successfully completes sterilization by the sterilization apparatus; and
10 delivering, by the postal service, the mail article to a specified
11 recipient.

1 10. The method of indicating proper sterilization of a mail
2 article of claim 9, further comprising, after the step of sterilizing, by the
3 sterilization apparatus, the mail article, the step of:

4 determining, by the postage service, if the postage stamp has
5 changed to the second color;

6 sterilizing, by the sterilization apparatus, the mail article if the
7 postage stamp has not changed to the second color.

1 11. The method of indicating proper sterilization of a mail
2 article of claim 9 wherein said step of sterilizing, by the sterilization
3 apparatus, the mail article includes emitting an electron beam by the
4 sterilization apparatus to sterilize the mail article.

1 12. A stamp for indicating proper sterilization of a mail article,
2 said stamp comprising:
3 a sheet of material having an outer surface and a back surface;
4 said outer surface displaying a color indicator; and
5 said back surface having an adhesive for affixing said sheet of
6 material to the mail article;
7 whereby said color indicator indicates a first color prior to being
8 subjected to a sterilization process and indicating a second color after
9 being subjected to a sterilization process.